

CLAIMS

1. A device for acquiring and monitoring over time the development of at least one product-related variable, including a support (24) intended to be associated with the product and supporting a set of at least one sensor (26) for measuring said variable and means (30, 32, 34) for processing the data output by the sensor so as to monitor the development of said variable relative to threshold values, characterized in that the processing means include a file system (30) in which the data output by the sensor is stored and a management algorithm (32) for organizing the storing of the data in the file system and managing the retrieval of said data, the file system and the management algorithm being embedded in the support.
2. The device as claimed in claim 1, characterized in that it includes a universal internal clock, the processing means (30, 32, 34) monitoring the development over time of said variable according to timetable data supplied by the clock.
3. The device as claimed in claim 2, characterized in that the processing means (30, 32, 34) include means for creating product monitoring phases, each corresponding to a state of the product, by assigning specific threshold and duration values to each phase.
4. The device as claimed in any one of claims 1 to 3, characterized in that it includes a display unit (36) for indicating any overrun of the or each threshold value(s).
5. The device as claimed in claim 4, characterized in that the display unit is a blinking indicator, the

color of which reflects a criterion for acceptance of a signaled overrun.

- 5       6.    The device as claimed in claim 5, characterized in that the blinking indicator comprises a light-emitting diode.
- 10       7.    The device as claimed in claim 6, characterized in that it includes an independent power supply battery (38) and voltage step-up means (40) for powering the light-emitting diode.
- 15       8.    The device as claimed in any one of claims 1 to 7, characterized in that it includes means (42, 46) for transferring the stored data to a remote product monitoring system, in response to a request to transfer said data sent by said system.
- 20       9.    The device as claimed in claim 8, characterized in that the means for transferring the data are wireless data transfer means.
- 25       10.   The device as claimed in any one of claims 1 to 9, characterized in that the support also includes means of encoding information by bar odes.
- 30       11.   A system for monitoring products by observing the development over time of at least one product-related variable, including a set of sensors (10) for measuring said variable and a remote monitoring center for displaying the data output by the sensors, characterized in that the sensors consist of devices according to any one of claims 1 to 10.
- 35       12.   The system as claimed in claim 11, characterized in that the remote monitoring center is connected to a computer network, in particular the Internet.